

SOUTH PACIFIC ISLANDS FISHERIES DEVELOPMENT AGENCY

UNDP/FAO/SPC

SECOND FISHERIES CONSULTATIVE COMMITTEE MEETING

Noumea, New Caledonia

18 - 22 October 1971

PROPOSED SUB-PROJECT

1. Title: Organization of a marine demonstration centre at St. Vincent Bay, New Caledonia.

2. Background and justification

- 2-1. The work of many specialists and in particular the last report by Mr Glude, expert in oyster farming, has emphasized the exceptional suitability of environmental conditions in St. Vincent Bay, New Caledonia.

- 2-2. Scientific research, especially since 1960, has produced a great deal of preliminary documentation on the hydrological and biological conditions.

- 2-3. Types of environment are exceptionally varied in St. Vincent Bay where there are:-

- The deltas and estuaries of the Ouenghi, Ouamenie and Tontouta rivers which bring fresh water and mineral salts.
- Numerous mangrove channels and large salt marshes easy to bar and to dam.
- Large inland muddy and sandy-muddy bays.
- Peninsulas and archipelagos with different kinds of sheltered shores sandy or rocky.
- Large coral formations fringing or barriers with a good interchange of ocean water through the St. Vincent pass.

- 2-4. Easy access by road and by boat facilitates transport of materials, equipment and products. With Tontouta International Airport close by, reproduction stock larvae and juveniles can be brought in from elsewhere (Australia, Japan, Hawaii, Tahiti).
- 2-5. Noumea being near affords logistics support in personnel and equipment, scientific support through the ORSTOM laboratories and easy liaison with the Headquarters of the South Pacific Commission and the Fisheries Agency.
- 2-6. There is a considerable local demand because of the high standard of living, especially from the 60,000 inhabitants of the Noumea complex.

The increase in local consumption has led to increasing importations:-

Purchases made by New Caledonia - 1000 dollars US

	<u>1969</u>	<u>1970</u>
Fresh, salted and frozen products -		
Fish	69,680	85,130
Crustaceans and molluscs	241,680	316,890
Tinned -		
Fish	380,190	419,770
Crustaceans and molluscs	<u>63,330</u>	<u>105,960</u>
Total	<u>754,880</u>	<u>927,750</u>

This represents importing from outside per inhabitant US \$ 6.56 in 1969 and US \$ 7.41 in 1970, the increase affecting mostly molluscs and crustaceans.

At present in New Caledonia for the oyster market alone about 300,000 dozens per year are sold at very high prices (US \$ 1.40 to 2.00 per dozen). The crustacean market, mostly prawns, amounts only to approximately a 100 tons because of supply difficulties and too high prices, US \$ 6 to 8 per kilo.

3. Objectives

To create and develop an experimental sea water and brackish water culture and farming centre to improve some activities under way (osyter farming) and to launch new productions (culture of other molluscs beside oysters, culture of prawns, culture of certain species of fish).

4. Work Programme

1 November 1971 - 29 February 1972:

- (1) Selection of sites and planning of major works.
- (2) Thorough reconnaissance to ascertain the availability of natural prawn stock in mangrove channels and inland bays.
- (3) Experimentation of fishing methods with set gear to catch predators, evaluation of the dynamics of the stock of crustaceans and fish and harvesting of adults in large size ponds.
- (4) Additional documentation to be obtained by the Project Manager in Australia, New Zealand, Japan, United States and Europe.
- (5) Submission of the detailed project to FAO and to the New Caledonian administration.

1 March 1972 - 31 July 1972:

- (1) Building of major works (dams and banks, supply and discharge of water), fitting of pumps and electricity.
- (2) Development of Japanese oyster culture and of spat from the United States.
- (3) Start of culture of some species of penaeid prawns in controlled 200 cubic metre tanks with local, Australian and Japanese stock.

1 August 1972 - 31 December 1972:

- (1) Study of growth rates of the major oyster species up to marketable size.
- (2) Study of growth rates of penaeid prawns and use of a wide variety of natural and artificial foodstuffs.
- (3) Storing controlled tanks some species of fish especially mullets (mugilides) to study feeding and reproduction.

5. Draft budget for the Fisheries Agency

Expert services:	US \$
3 months expert qualified skipper fisherman	7,500
10 months expert molluscs culture	25,000
12 months expert prawn culture	30,000
Travel by experts and the Project Manager	15,000
Specialized scientific equipment	12,500
Fishing gear and other equipment	10,000
	Dollars US 100,000
	or 10,000,000 fr CFP

6. Draft budget for the Territorial counterpart

Per diem of experts	20,000
Transport (Land Rover, van, light craft with outboard engine)	10,000
Infrastructure work -	
Buildings and shelters	20,000
Dams, earthmoving, work on banks	15,000
Hydraulic supply and discharge pipes	5,000
Concrete controlled tanks	10,000
Pumps and sluices	15,000
Electrical installation	10,000
Purchase and transport of breeding stock (oysters, prawns)	4,000
Purchase of natural and artificial foodstuff	4,000
Staff -	
2 qualified assistants	25,000
2 professional manual workers	12,000
	Dollars US 150,000
	or 15,000,000 fr CFP

That is split 40% for SPIFDA and 60% for the Territory of New Caledonia.

Note: It should be noted that part of the territorial counterpart may be provided by the administration in kind (Public Works, Agriculture Civil Engineering, Fisheries Service) and that part of the equipment can be made available temporarily (vehicles, electrical installation, pumps).

7. Recruitment of experts

M. John Glude should remain in charge of the oyster development programme with if necessary a second expert to follow up problems of controlled reproduction of various species of molluscs.

An expert in crustacean culture with scientific qualifications as a laboratory manager and practical experience of managing experimental farms during at least two years will have to be recruited. A skipper fisherman qualified in backwater and delta channel fishing will be recruited for three months for the preliminary phase. Depending on M. Villaluz's conclusions an expert may be recruited later for fish farming.
